

Application no.: 09/700,270

Docket no.: SGL-2009-US

AMENDMENTIn the claims

Please amend claims 1 and 4, cancel claims 5-7 and 12-14 and enter new claims 17-29 as set forth hereafter in the complete listing of the claims.

1. (currently amended) A method for diagnosing hypertension or a predisposition to hypertension comprising determining whether a risk polymorphism is present in the promoter of an inducible nitric oxide synthase (iNOS) gene, wherein the risk polymorphism is a four base pair insertion located between positions -891 and -575 5' to the transcription start site in the promoter of the iNOS gene,

whereby diagnosis of hypertension or predisposition thereto is determined based upon the presence or absence of the risk polymorphism.

2. (cancelled)

3. (previously presented) A method according to claim 1, comprising determining whether an individual is homozygous or heterozygous for a risk polymorphism in a NOS gene.

4. (currently amended) A method of diagnosis and treatment of hypertension comprising diagnosing hypertension or predisposition thereto according to claim 1

determining whether a risk polymorphism is present in the promoter of an inducible nitric oxide synthase (iNOS) gene, wherein the risk polymorphism is a four base pair insertion located between positions -891 and -575 5' to the transcription start site in the promoter of the iNOS gene, and

treating an individual diagnosed with hypertension or predisposition thereto based upon the presence or absence of the risk polymorphism to reduce, prevent or otherwise ameliorate hypertension.

5-14 (cancelled).

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15. (previously presented) A method according to claim 1, wherein said iNOS gene is a NOS2A gene.

16. (cancelled)

17. (new) The method of claim 1, wherein the presence or absence of the risk polymorphism is detected in DNA of a subject.

18. (new) The method of claim 17, wherein the DNA is single-stranded.

19. (new) The method of claim 1, wherein diagnosis of hypertension or predisposition thereto is determined in a Caucasian.

20. (new) The method of claim 4, comprising determining whether an individual is homozygous or heterozygous for the risk polymorphism in a NOS gene.

21. (new) The method of claim 4, wherein said iNOS gene is a NOS2A gene.

22. (new) The method of claim 4, wherein the individual is Caucasian.

23. (new) The method of claim 4, wherein the presence or absence of the risk polymorphism is detected in DNA of a subject.

24. (new) The method of claim 23, wherein the DNA is single-stranded.

25. (new) The method of claim 4, wherein the individual is treated with an effective amount of an antihypertensive pharmaceutical, administration of an anti-hypertension therapy or a combination thereof.

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26. (new) The method of claim 25, wherein the anti-hypertension therapy is selected from the group consisting of correction of obesity, correction of alcohol intake, correction of salt intake, lack of regular exercise or combinations of the foregoing.

27. (new) The method of claim 25, wherein the antihypertensive pharmaceutical treatment is selected from the group consisting of beta-adrenoceptor blocking drug, calcium channel blocker, angiotensin converting enzyme (ACE) inhibitor, vasodilator, alpha-blocker and centrally acting drug.

28. (new) The method of claim 27, wherein the beta-adrenoceptor blocking drug is in combination with thiazide.

29. (new) The method of claim 27, wherein the centrally acting drug is selected from the group consisting of prazosin, terazosin and doxazosin.